

Fight the Stress of Urban Education with the **ARTS**

The arts not only build our brains, they insulate them from our stressful urban environments.

By Dennis W. Creedon

Stress is bad for children. It's associated with health problems, school failures, and youth delinquency. But the arts can help children reduce and manage their stress. The arts can be especially important in inner-city neighborhoods plagued by violence and where the resulting stress can be particularly damaging to children.

High stress levels have been associated with a variety of health problems, including asthma and depression. The Centers for Disease Control and Prevention reported that asthma was the cause of 14.7 million school absences in 2002 (Akinbami 2010). And a major study in Chicago revealed that up to 50% of the city's urban youth suffer from various levels of depression and that up to 10% suffer from other emotional illnesses related to the stressors found in their urban environment (VanLandeghem 2003).

Fear and anxiety affect critical areas of a child's development required for education. Jack Shonkoff and Deborah Phillips note that stress directly affects "attention, memory, planning, and behavior control" (2000: 213).

When the mind is under emotional stress, it produces the peptide cortisol. Cortisol is an invaluable hormone that serves to insulate the mind from negative memories. It enables the mind to buffer itself against a traumatic experience. Cortisol generally is a blessing because we don't become controlled by our past negative experiences. However, if cortisol is not kept in balance, learning can and will stop.

Chronic high cortisol levels eventually destroy hippocampal neurons associated with learning and memory (Vincent 1990). Even short-term stress-related elevation of cortisol in the hippocampus can hinder our ability to distinguish between important and unimportant elements of a memorable event (Gazzaniga 1989).

The arts and music education can help because they promote the production of endorphin, and this peptide counteracts cortisol's undesirable tendency to reduce students' ability to concentrate. Endorphin enables students to manage personal stress and enhances their learning potentials. In this way, music and the arts can directly enhance recall and memory (Sprenger 1998).

The power of the arts in helping children and youths rebuild their emotional and physical lives has been noted for more than a generation. Incarcerated youths who receive arts education programs are unlikely to commit repeat offenses once released from prisons (NGA 2002). Music and art therapy are used in most children's hospitals. Cognitive research shows that a well-structured music and arts education program enhances the emotional well-being of children, enhances their readiness for learning, reduces stress, and re-

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duces negative social behaviors (Teplin et al. 2002).

One can think about urban art and music education as preventive pediatric medicine. With so many children coming into urban schools already overloaded with stress, ignoring their mental and physical health needs is unethical. Unfortunately, current economic factors force many administrators to choose between hiring a nurse or an arts teacher. But the power of the arts to instill positive emotions is vital for schools. Sylwester reminds us that "emotion is important in education — it drives attention, which in turn drives learning and memory" (1994: 60).

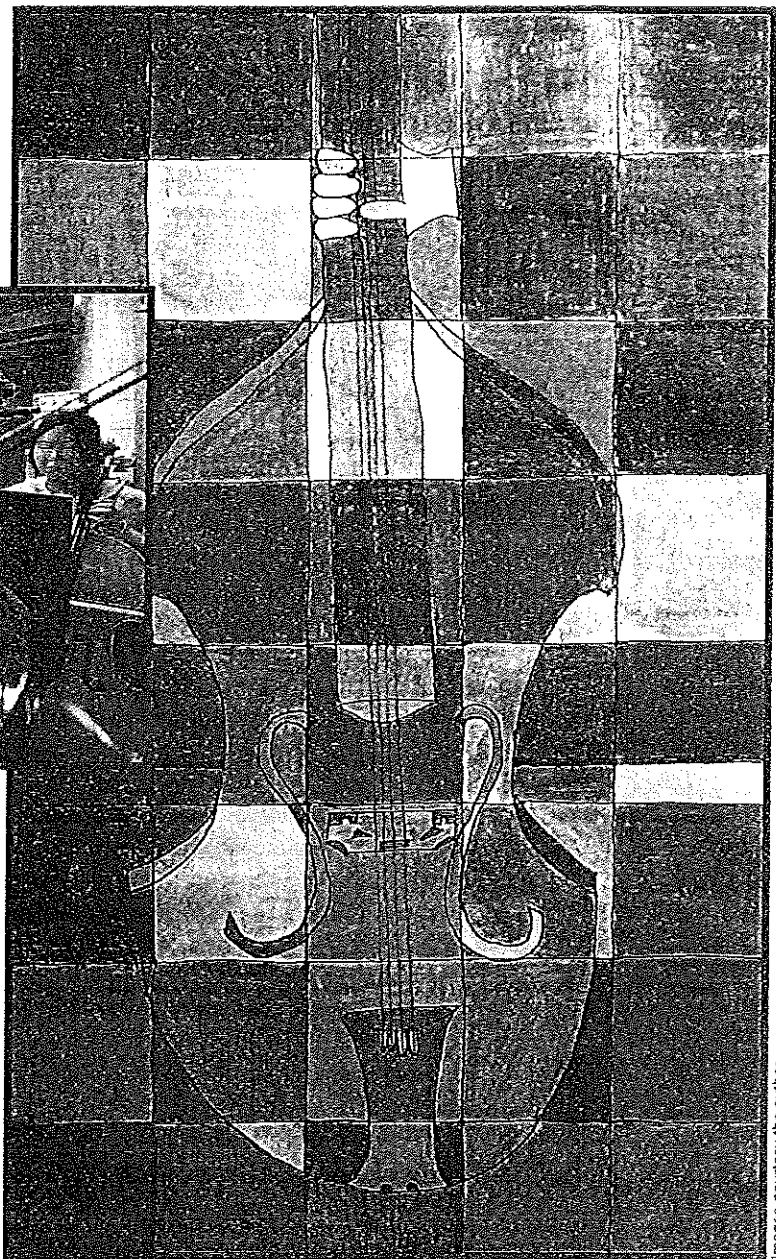
In urban learning environments, integrating the arts with other subjects can nurture an emotionally positive social context. Artist residency programs can partner with teachers in curricular projects, and educators and students can participate in community arts programs. For the social context to blossom with positive stress reduction, active learning processes are needed that invite children to engage with music, dance, drama, and the visual arts.

Ann Alejandro (1994) integrated visual art into her 2nd-grade reading programs to reduce stress. Using prints of Impressionist paintings, her students created word banks out of the characters, settings,

Reading scores went up from 28% student mastery in 1991 to 80% in 1992" (1994: 16).

Music has a special ability to alter emotional states. Students who study instrumental music have an enhanced ability to focus when they're engaged in other work, and they're more able to deal with the stressful situations most common in urban environments (Walker and Boyce-Tillman 2002). One study noted that merely listening to just 23 minutes of music reduced cortisol in the blood (Field et al. 1998).

Music also can directly support a school's literacy goals. In 1987, Kate Gfeller reported that integrating group song writing into language arts activities built a sense of community, and that helped to support children who struggled with reading. The group song writing brought down barriers that separated



themes, colors, situations, and weather in the works of art. Students drew and painted their versions of these words on one side of an index card and then printed the word on the other side. Students then created their own paintings out of their collections of word cards and used their word cards to write stories about their paintings.

Alejandro states that she is "convinced of the parallels between teaching children how to draw and teaching them how to read and write. In all cases, students need to learn how to see, to interpret data from the world, the canvas, and the page" (1994: 13). After one year, her students took the Texas Assessment of Academic Skills. Her students' "writing had moved from 38% the previous year to 88% mastery.

Images courtesy the author

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struggling students from their more advanced peers. When a child feels unable to join in a learning experience and a teacher fails to invite their participation, the sense of loneliness for the child can become suffocating. The depression that children experience when they can't grasp content as quickly as their peers also undercuts their performance on tests.

Arts-based educational programs also have had striking successes with disadvantaged populations, especially at-risk and incarcerated youth. The arts contribute to lower recidivism rates, increased self-esteem, the acquisition of job skills, and the development of much needed creative thinking, problem solving, and communications skills (NGA 2002: 1).

Integrating arts-based creative processes into teaching and learning will enhance student mastery of critical content while it also supports the emotional and physical needs of our children. The arts not only build our brains, they insulate them from our stressful urban environments. In short, all children, and especially urban children, need the arts if they are to thrive and blossom to their full potentials.

We should not wait until our children are emotionally disturbed or incarcerated before we offer them the positive cognitive, social, medical, and emotional benefits of a well-rounded arts education. To deny urban children arts education is societal child abuse. For those who feel that we can't afford arts education, we must remind them about the cost of a child who drops out of school or becomes incarcerated. A full education that includes the arts is the insurance we pay for our nation's democracy. ■

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